



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,497	03/16/2001	Andrew A. Goldfine	A351.12-0002	3946
164	7590	10/27/2003		
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002				
			EXAMINER WATKINS III, WILLIAM P	
			ART UNIT 1772	PAPER NUMBER

DATE MAILED: 10/27/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/787,497

Applicant(s)

GOLDFINE, ANDREW A.

Examiner

William P. Watkins III

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 37-52 and 74-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 37-52 and 74-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

Art Unit: 1772

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 74 and 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Spertus (U.S. 3,546,055) or Nakayama (U.S. 4,085,176).

See Figures 1 and column 3, lines 15-25 of Spertus. The examiner takes the case of the threads abutting as forming a netting structure. See Figure 2, column 2, lines 35-50 of Nakayama.

3. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear how the resin material can be expanded in claim 37 yet void free in claim 47.

Art Unit: 1772

4. Claims 75 and 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Habib (U.S. 3,285,768) or Bethe (U.S. 3,961,001).

See Figure 4 of Habib and Figure 5 of Bethe. The examiner takes the projections as being attached to the fabric and in contact with each other.

5. Claims 37-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Ambrose (U.S. 3,840,269).

See the abstract and Figures 7, 2, and 8, col. 4, lines 1-10. Ambrose teaches a mold with two parts. The bottom part has various surfaces, which form mold cavity portions, which in turn form the top surface of Figure 2. The resin passes through the holes in the mesh layer during expansion. The cushion layer is further processed after removal from the mold (col. 4, lines 15-30).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 1772

art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 37-41, 44-45, 46 and 76-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner (U.S. 3,016,317) in view of Ambrose (U.S. 3,840,269).

Brunner teaches a closed cell foam mat with impact projections on the top and bottom surfaces (Figure 3 and 1, col. 2, lines 25-35). Ambrose teaches putting a net shaped reinforcing layer in a foam article to prevent tearing and crumbling of the foam (col. 4, lines 4-55). Ambrose further teaches forming the net reinforcement in the foam layer by expanding resin through the netting in a closed mold, which also provides desired shapes on the surface of the foamed article (see the abstract and Figures 7, 2, and 8, col. 4, lines 1-10). The instant invention claims a flexible layer structure with impact projections in contact and on both sides of the mesh layer with the article being formed by expansion in a closed mold of resin and removal to finish the article. It would have been obvious to one of ordinary skill in the art to add a mesh layer to the article of Brunner to prevent the foam layer from tearing or crumbling because of the teachings of Ambrose. It further would have been obvious to one of ordinary skill in the

Art Unit: 1772

art to form the combined article by foaming resin in a mold in order to join foam to both sides of the mesh layer because of the teachings of Ambrose. The top layer of the combination is finished with a cover layer after molding. Brunner teaches the use of any suitable plastic foam (col. 3, lines 20-30).

8. Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner (U.S. 3,016,317) in view of Ambrose (U.S. 3,840,269) as applied to claims 37-41, 44-45, 46 and 76-79 above, and further in view of Hanusa (U.S. 4,138,283).

Hanusa teaches the formation of grooves or projections in a foam layer by cutting (col. 1, lines 20-45). The instant invention claims molding reins over a mesh and using the mold to shape the top of the article then removal from the mold and forming bottom projections by cutting. It would have been obvious to one of ordinary skill in the art to form the projections of Brunner as modified above by either cutting or molding as alternate means because of the teachings of Hanusa and Ambrose.

Art Unit: 1772

9. Claims 37-41, 42-43 and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spertus (U.S. 3,546,055) or Nakayama (U.S. 4,085,176) in view of Ambrose (U.S. 3,840,269).

Spertus and Nakayama teach molded resin elements extending from and joined to a mesh structure as noted above. Ambrose teaches a method of molding resin and joining it to a mesh structure as noted above. The instant invention claims forming a mesh with separate projections joined on both sides of the mesh by molding a closed mold. It would have been obvious to one of ordinary skill in the art to have formed the projections of Spertus or Nakayama by foaming resin in a closed mold in order to join the projections to the mesh material because of the teachings of Ambrose.


10. Applicant's arguments with respect to claim 37-52 and 74-79 have been considered but are moot in view of the new ground(s) of rejection.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 703-308-2420. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

Art Unit: 1772

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

A handwritten signature in black ink, appearing to read "William P. Watkins III". The signature is written in a cursive style with a large, stylized "W" and "I".

WW/ww  
October 16, 2003

**WILLIAM P. WATKINS III  
PRIMARY EXAMINER**